

Supplemental Material

Supplemental Table 1. Adjusted clinical outcome analysis of proBNP with BMI as ordinal variable.

| | proBNP (>125 pg/mL) | | Log transformed proBNP | |
|--|---------------------|---------|------------------------|---------|
| Model 1 (age, sex, race, BMI, hypertension, CAD, DM, smoking, CKD) | | | | |
| | OR (95% CI) | P-Value | OR (95% CI) | P-Value |
| Death (n=1059)* | 2.8 (1.6-4.8) | <0.0001 | 2.1 (1.6-2.7) | <0.0001 |
| New HF (n=957) | 2.8 (1.2-6.2) | 0.013 | 3.1 (2.0-4.6) | <0.0001 |
| Ventilator Need (n=1059) | 3.3 (2.2-4.9) | <0.0001 | 2.0 (1.6-2.5) | <0.0001 |
| | β (95% CI) | P-Value | β (95% CI) | P-Value |
| Length of Stay (n=1059) | 4.7 (2.6-6.7) | <0.0001 | 2.7 (1.5-4.0) | <0.0001 |
| ICU Duration (n=1059) | 2.5 (0.9-4.0) | 0.002 | 1.4 (0.5-2.4) | 0.003 |
| Model 2 (Model 1 + troponin I) | | | | |
| | OR (95% CI) | P-Value | OR (95% CI) | P-Value |
| Death (n=636) | 3.5 (1.6-7.5) | 0.002 | 2.0 (1.4-3.0) | <0.001 |
| New HF (n=578) | 1.9 (0.8-4.6) | 0.138 | 2.6 (1.6-4.3) | <0.0001 |
| Ventilator Need (n=636) | 3.6 (2.2-5.7) | <0.0001 | 2.2 (1.6-2.9) | <0.0001 |
| | β (95% CI) | P-Value | β (95% CI) | P-Value |
| Length of Stay (n=636) | 4.4 (1.5-7.4) | 0.004 | 3.3 (1.4-5.2) | 0.001 |
| ICU Duration (n=636) | 2.1 (-0.1-4.3) | 0.062 | 1.9 (0.5-3.3) | 0.008 |

*n indicates patients analyzed for indicated model and specified outcome. proBNP: pro-B-type natriuretic peptide, HF: heart failure, ICU: intensive-care unit, BMI: body mass index, CAD: coronary artery disease, DM: diabetes mellitus, CKD: chronic kidney disease. Logistic regression performed for categorical outcomes (Death, New HF and Ventilator Need), and regression coefficient is reported as an Odds Ratio (OR). Linear regression performed for continuous outcomes (Length of Stay, and ICU Duration), and regression coefficient is reported as β .

Supplemental Table 2. COVID-19 Registry patients with and without proBNP measurements.

| Variable | proBNP measured (n=1232) | No proBNP measured (n=1426) | P-value |
|--|--------------------------|-----------------------------|---------|
| Sex (male) | 657 (53.7%) | 692 (48.5%) | 0.008 |
| Age (years) | 62.9 (\pm 17.5) | 56.5 (\pm 19.7) | <0.0001 |
| Race/Ethnicity | | | 0.72 |
| White | 343 (28.0%) | 401 (28.1%) | |
| Black | 440 (36.0%) | 537 (37.7%) | |
| Hispanic | 319 (26.1%) | 361 (25.3%) | |
| Other | 121 (9.9%) | 127 (8.9%) | |
| Body mass index, kg/m ² | 30.3 (\pm 10.0) | 29.2 (\pm 7.7) | 0.0068 |
| Hypertension | 702 (57.4%) | 691 (48.5%) | <0.0001 |
| Diabetes | 387 (31.6%) | 387 (27.1%) | 0.011 |
| Coronary artery disease | 110 (9.0%) | 99 (6.9%) | 0.051 |
| Heart failure | 130 (10.6%) | 72 (5.1%) | <0.0001 |
| Estimated GFR <60 cc/min (race adjusted) | 435 (36.0%) | 226 (29.7%) | 0.01 |
| History of smoking | 222 (18.2%) | 227 (15.9%) | 0.127 |
| Medications | | | |
| Aspirin | 143 (11.7%) | 135 (9.5%) | 0.062 |
| Statin | 223 (18.2%) | 186 (13.0%) | <0.0001 |
| ACEi or ARB | 197 (16.1%) | 164 (11.5%) | 0.001 |

Comparison of Demographics and Clinical Variables in patients with and without proBNP values measured. proBNP: pro- B-type natriuretic peptide, GFR: glomerular filtration rate, ACEi: angiotensin-converting enzyme inhibitor, ARB: angiotensin II receptor blocker